

traction did occur in one case, but its effects were overcome with light gymnastics. The treatment is especially valuable where two burned areas lie against each other, since it prevents their adhesion. To recommend it are its simplicity, cheapness, avoidance of infection, accelerating influence on healing, favorable effect on cicatrization, and ameliorating effect on pain.

The Diagnosis and Treatment of Unilateral Hemorrhagic Nephritis.—FRONNEHEITNE (*Ann. d. mal. d. org. gén.-urin.*, 1910, xxviii, 1, 897) says that one of the most serious symptoms of genito-urinary disease is hematuria. The presence of blood in the urine is the first symptom which attracts the attention of the patient and causes him to seek assistance from a physician. Fronnehteine reports the case of a patient, aged thirty-two years, who entered the hospital on account of abundant hematuria which had lasted for a month. The hematuria was accompanied by constricting pain in the right side of the upper abdomen. The father had suffered from nephritis and one of his brothers had had blood in his urine. Cystoscopic examination showed that the blood was coming from his right kidney. In the presence of profound anemia and the failure of medical treatment nephrectomy was performed. The results of operation were very satisfactory. The removed kidneys presented the changes of a hemorrhagic nephritis. Abundant hemorrhages arising from the kidney depend always upon an anatomical lesion of the renal parenchyma, and there can be no hemorrhage without an anatomical lesion. Insignificant anatomical changes may be the cause of abundant renal hemorrhages. An acute hemorrhagic nephritis may be bilateral or unilateral, and in the latter case it ought to be differentiated, under the name of hematuric nephritis, from cases of hematuria due to tumor. Israel's symptom, that is, the presence in the urine of vermiform clots, occurs especially in hematuric nephritis, and in this condition surgical intervention is indicated.

The Representation of Hypertrophied Prostate by the Skiagraph.—BURCKHARDT and FLOERCKEN (*Deut. Ztschr. f. Chir.*, 1910, cv, 110) say that the condition of the middle lobe and the anatomical relations of the hypertrophied prostate to the bladder often make the diagnosis difficult. Palpation through the rectum, as a rule, fails completely, and the use of an inflexible sound often fails to give reliable information. The use of the cystoscope is rendered difficult by the projection of the prostate into the bladder and by the presence of infection. These writers have already called attention to the value of filling the bladder with oxygen for cystoscopy and radioscopy. It is striking how distinct in form and size foreign bodies in the bladder are shown on the x-ray plate when oxygen is employed to fill the bladder beforehand. This is accomplished either with a catheter directly from the oxygen tank or by means of a 3 per cent. peroxide solution in a flask with potassium permanganate added. From the flask the developing oxygen is passed through the catheter into the bladder. The introduction of the oxygen is stopped as soon as the filling of the bladder is indicated by a feeling of slight tension on the part of the patient. The bladder should be emptied thoroughly before it is filled with the oxygen. A two-way catheter may be employed with one way closed until the oxygen is being

introduced, when through the other opening any fluid in the bladder may be slowly evacuated. The skiagram then taken with the use of a compression apparatus will give very distinctly the exact contour of the bladder and any change in it produced by a projecting portion of the prostate at the neck of the bladder. Six illustrations are given, showing very well the effect of the oxygen in outlining the limits of the bladder and the isolated hypertrophy of the middle lobe. This method may be of advantage in deciding the operation to be performed.

Inflammatory Tumors of the Sigmoid Flexure.—ARNSPERGER (*Mitt. a. d. Grenzgeb. d. Med. u. Chir.*, 1910, xxi, 557) refers to a case seen twelve months before, in which a diagnosis of carcinoma of the sigmoid flexure was made. The growth was excised successfully and the examination of the specimen showed that it was inflammatory in nature. Recently a second case was observed, in which at postmortem, the diagnosis of carcinoma was made, and only by a microscopical examination was its inflammatory nature established. A third patient operated on died and the microscopic examination showed the tumor to be inflammatory and to be formed about a number of diverticula filled with pus, one of which had perforated. The greater number of the circumscribed and localized chronic inflammations of the large intestine are specific and most of them tuberculous in nature. The place of election for their occurrence is in the cecum near the ileocecal valve, although the localized tuberculous disease is found in the sigmoid flexure. Localized subacute and chronic inflammations with the formation of large tumors occur in the sigmoid and are sharply defined from the sound portion of the bowel. They are hard in consistency, with an inclination to adhesions to the surrounding structures, and clinically resemble carcinomas completely. In connection with specific disease and inflammation about a diverticulum, there occurs a simple process which localizes itself in the subserous tissues and sets up a dissecting infiltration. The mucous membrane remains intact, the muscularis hypertrophies, and stenosis may be absent. Because of the impossibility of distinguishing, clinically, between such an inflammatory tumor and a carcinoma, resection of the diseased portion is indicated whenever it is possible. When there is marked stenosis, a very acute inflammatory condition, or the tumor is inoperable, colostomy is indicated. In all doubtful cases an exploratory laparotomy should be done and a piece of the tumor should be removed for microscopic examination.

Concerning the Etiology of Myositis Ossificans.—EWALD (*Zentralbl. f. Chir.*, 1910, xxxviii, 771) says that it is generally admitted that the bone formation in myositis ossificans is found only in certain muscles, as the brachialis internus and quadriceps femoris, especially in the vastus externus portion, and very rarely in the gluteal muscles, deltoid, coracobrachialis, and masseter. Numerous causes have been offered, but there is no explanation of why the process showed such predilection for these two places, while all parts of the trunk and extremities are frequently exposed to wounds and contusions. It is always found near joints. Ewald refers to a case of an acquired dislocation of the

hip in a forty-year-old-man, in whom the x-rays showed the separation of a small piece of bone which with its attached periosteum could explain the bone formation directly about the neck of the femur, but was not sufficient to explain the extensive area of new-bone formation involving all the muscles posterior to the joint and the iliopectineus. Three months after the accident the x-rays showed a large shadow above and below the femoral neck. Ten months later most of this had disappeared. Ewald believes that the synovial fluid is responsible for the condition found. It passes between the muscle fibres and accounts for the shell-like construction of the new-bone formation, by irritation of the intestinal connective tissue in the muscle. This theory is confirmed by the frequent recurrence after too early operation, as well as the finding of cysts in the mass filled with clear amber fluid, resembling synovial fluid. Myositis ossificans develops in broad fleshy muscles lying over the wounded joint and considerably torn.

The Action of Radium on Hypertrophy of the Prostate.—The editor of the *Amer. Jour. Urology*, 1910, vi, 249, in discussing the work of Desnos on this subject, says that three distinct rays are given off by radium, and are designated as A, B, and V rays. The A rays affect the superficial tissues intensely, but penetrate only slightly. The B rays, which are far more numerous, are divided into the soft, medium, and hard, and possess an elective action on certain tissues. The V rays, which are far less numerous, have a very marked penetrating power. It is easy to filtrate the various radium rays by the interposition of metallic or other screens. The metallic screens decompose the B rays, which give rise to secondary rays. Superficial rays, only slightly irritant to the surface of penetration and acting on the deep-seated structures very slowly, necessitate a rather prolonged application. The non-metallic substances, such as rubber or thick paper, arrest the soft A and B rays, and allow the V and hard B rays to pass through. Desnos reached the prostate through the rectum and urethra, carefully protecting the mucosa by very simple instruments. In the rectum he used a large rubber tube, not perforated. A small silver cylinder containing the radium is passed into the tube and the thin wall of the tube brought into contact with the prostate. In the urethra sounds are passed, in the ends of which, under a gum varnish, is placed a piece of lead or aluminum, in the concave portion, so that the anterior portion of the urethra is protected. The urethral route is far more efficacious than the rectal. Twelve applications is the minimum, but often fifteen to twenty are necessary. The minimum interval is forty-eight hours, three or four days or sometimes longer being necessary. The indications for prostatectomy remain, the application of radium representing merely a palliative treatment. It is particularly adapted to prostates of medium size, where the hypertrophy involves the lateral lobes. Of 16 prostatitis submitted to treatment, Desnos obtained no improvement in 3, while in the 13 others an improvement or a cure was obtained, and no complication occurred during the treatment. Five times the retention completely disappeared after from twelve to fifteen applications. It occurred gradually in 2 cases, while in 3 others it suddenly disappeared within eight days, and the result has been maintained respectively eight

months, seven months, six and a half months, and four months. In none of patients was any change in the size of the prostate made appreciable by rectal examination, but a softening of the gland was almost always noted. But it is well known that in the production of retention the most important element is the increased vascular development and congestion. Generally speaking, radium possesses an influence on the congestive phenomena, and in several patients the large and intense red projections surrounding the neck of the bladder covering the prostatic projections have been seen to disappear by the aid of the cystoscope.

A Contribution to our Knowledge of Carcinoma of the Stomach.—MATTI (*Deut. Ztschr. f. Chir.*, 1910, clv, 425) makes an extensive study based upon 19 cases of carcinoma ventriculi, and one with a considerable hyperacidity and ulcer of the stomach, complicated by a peptic ulcer in the afferent loop of the jejunum, after a Y-formed gastroenterostomy according to Roux. The affected portion of mucous membrane taken for study was removed from the region of the anastomosis in some cases, while in the remaining cases it was taken from the extirpated portion of stomach. Matti studied, particularly, the relation between the gastric carcinoma and the preceding changes in the mucosa. He distinguishes five groups of cases: (1) In some cases the chronic gastritis with atrophy of the glandular parenchyma is a completely independent condition and is due to one or several of the known causes of chronic gastritis. Its presence with a simultaneously existing gastric carcinoma is only accidental. (2) In other cases the carcinoma has developed in an area of chronic, atrophic gastritis, that is, upon a degenerated mucous membrane. To this group belongs the large number of gastric carcinomas with achylia. (3) There can be no doubt that a gastric carcinoma situated at the pylorus and extensively ulcerated, through the damming back of gastric contents and the foul secretion of the ulcer, may damage the mucous membrane and produce pathological changes in the interstitial tissue as well as in the glandular parenchyma. In some cases this local cause is the most important factor in the production of the chronic changes in the mucus membrane. (4) Combination forms of the preceding types may occur. (5) A carcinoma developing upon a simple ulcer shows only insignificant changes in the gastric mucosa, and often only in the early stages. In the late stages of a carcinomatous ulcer, we may find interstitial gastritis and glandular atrophy, as in patients with chronic simple ulcer, which has led to stenosis of the pylorus. The damage to the specific glandular parenchyma, however, is less intense than in a case of "primary" gastric carcinoma. This slight effect of the tumor upon the remaining mucous membrane depends upon the morphological peculiarities of the growth. When we consider that a simple ulcer, even when it has existed for years, produces no changes in the mucous membrane, at the most only an increase of the superficial cells (the most resisting form of stomach cells), we better understand why a carcinoma originating in an ulcer is more rarely associated with any considerable changes in the mucous membrane, than a "primary" carcinoma. In gastric carcinoma, with achylia, the insufficiency of hydrochloric acid and the deficient production of enzymes, is characterized anatomically by the picture of